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Claims

1. Process for producing pipe sleeves (10; 20; 30; 50) made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, comprising the following steps:
 - a) providing a nonwoven web (11; 21; 31; 51) made of mineral wool which is provided with an uncured binder,
 - b) winding up the nonwoven web (11; 21; 31; 51) on a winding mandrel (2) of a winder,
 - c) curing the binder,characterized in that at least one reinforcing layer (12, 13; 22; 32, 33; 52) is provided before the nonwoven web (11; 21; 31; 51) runs into the winder, in such a way that during the winding the said reinforcing layer becomes a constituent part of the pipe sleeve produced as a result.
2. Process according to Claim 1, characterized in that the at least one reinforcing layer (22; 32, 33) is applied to the nonwoven web (21; 31) in such a way that it is wound up with it and, following winding, is present within the pipe sleeve (20; 30).
3. Process according to Claim 2, characterized in that the reinforcing layer comprises a plurality of separate strips (32, 33), which are in each case placed on the nonwoven web (31) and are then wound up together with the latter.
4. Process according to one of Claims 1 to 3, characterized in that the reinforcing layer (13) is added to the trailing end of the nonwoven web (11) in such a way that it comes to lie on the outside of the pipe sleeve (10) with

the effect of a lamination, as the last layer arranged around the full circumference.

5. Process according to one of Claims 1 to 4, characterized in that the at least one reinforcing layer (12; 52) is applied to the winding mandrel (2) before the winding of the nonwoven web (11; 51) in such a way that it provides the inner surface of the pipe sleeve (10; 50) determining the clear internal diameter of the pipe sleeve.
6. Process according to one of Claims 1 to 5, characterized in that the reinforcing layer (12, 13; 22; 32, 33; 52) is a glass nonwoven, a woven glass fibre fabric, in particular made of E-glass, or the like.
7. Process according to one of Claims 1 to 6, characterized in that the reinforcing layer is wetted with additional binder before being provided for the winding operation.
8. Pipe sleeve (20; 30) made of mineral wool for insulating pipelines or for reducing the sound level in pipeline systems, the pipe sleeve being formed of a wound nonwoven web (21; 31) with cured binder produced by means of a process according to any one of Claims 1 to 7.
9. Pipe sleeve (20; 30) made of mineral wool for insulating pipelines, the pipe sleeve being formed of a wound nonwoven web (21; 31) with cured binder, characterized in that there is at least one reinforcing layer (22; 32, 33) on the inner side of the pipe and/or enclosed at at least part of the boundary between successive wound layers.
10. Pipe sleeve according to Claim 9, characterized in that the reinforcing layer (22; 32, 33) is enclosed within the wound layers.

11. Pipe sleeve according to Claim 9 or 10, characterized in that the reinforcing layer (32, 33) comprises a plurality of separate strips.
12. Pipe sleeve according to any of Claims 9 to 11, characterized in that a reinforcing layer (13) in the form of a trickle guard is wound circumferentially around it.
13. Pipe sleeve (50) made of mineral wool for sound-level reduction in pipeline systems, in particular of heating installations (40) or ventilation systems, characterized in that it has at least one reinforcing layer (52) which provides the inner surface of the pipe sleeve (50) that determines the clear internal diameter of the pipe sleeve.
14. Pipe sleeve according to one of Claims 9 to 13, characterized in that the reinforcing layer (12, 13; 22; 32, 33; 52) is a glass nonwoven, a woven glass fibre fabric or the like.
15. Pipe sleeve according to one of Claims 9 to 14, characterized in that the reinforcing layer includes particulate material, such as infrared radiation absorbing material or heat shielding material.
16. Pipe sleeve according to one of Claims 9 to 15, characterized in that the reinforcing layer includes a foil material, such as a heat reflective foil containing a metal like aluminum.
17. Pipe sleeve according to one of Claims 9 to 16, characterized in that the reinforcing layer is treated with a biocide agent.

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18. Pipe sleeve according to one of Claims 9 to 17, characterized in that the reinforcing layer is provided with means for allowing separation of wound layers in order to reduce external or internal diameter of the pipe.